



SAS[®] Forecast Analyst Workbench 5.3: Upgrade and Migration Guide, Second Edition

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SAS® Forecast Analyst Workbench 5.3: Upgrade and Migration Guide, Second Edition

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Pre-migration Tasks

Prerequisites for Migrating 5.1 to the First Maintenance Release of SAS Forecast Analyst Workbench 5.3

When you are performing a migration from SAS Forecast Analyst Workbench 5.1 installed on SAS 9.3 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 installed on the fourth maintenance release of SAS 9.4, the following prerequisites apply. Migrating from SAS 9.3 to the fourth maintenance release of SAS 9.4 is implicitly performed during this migration.

- You must be familiar with the SAS 9.4 installation and configuration processes. For more information, see <http://support.sas.com/documentation/installcenter/94/index.html>.
- Review the system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3. The detailed system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3 are available at <http://support.sas.com/documentation/installcenter/en/ikforecstanofrndmsr/69170/HTML/default/index.html>.
- Review the instructions described in *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.
- Ensure that you comply with the SAS 9.4 system requirements. For more requirements information, see “SAS 9.4 System Requirements” at <http://support.sas.com/resources/sysreq/index.html>.
- Ensure that the operating system users and groups that exist on the source system also exist on the target system in order to maintain consistency in file access permissions.
- Make a backup of `SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data` and UIART.
- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. In SAS Deployment Wizard, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before migrating SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

Update the Migration Properties File

To update the migration utility properties file:

- 1 Make a copy of the `smu.properties.template` file (that is available at *SAS Software Depot*>/utilities/smu93) and save the copy with the name `smu.properties` at the same location.
- 2 Edit the `smu.properties` file as required by your deployment.

For more information, see *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

Migration Tasks

Create a Migration Package

On the source system that contains SAS Forecast Analyst Workbench 5.1, run the SAS Migration Utility. For instructions on how to run the SAS Migration Utility, see *SAS 9.4 Intelligence Platform: Migration Guide*. The guide is available at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

The analysis phase of the migration checks the version of the solution that you are migrating to, and then creates a migration package. The migration package is created at a location that you specified in the `SMU.Output.Dir` property in the `smu.properties` file.

The SAS Migration Utility also generates a report (`FullReport.html`) that shows whether the migration package was created successfully.

The report is generated at the following location:

- **On Windows:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`
- **On UNIX:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

Deploy the First Maintenance Release of 5.3 By Using the Migration Package

In order to deploy the first maintenance release of SAS Forecast Analyst Workbench 5.3 by using the migration package, choose the following settings in SAS Deployment Wizard:

- Select **Custom Configuration**.
- Select the **Perform Migration** check box, and then specify the path of the migration package that you created.
- Select **SASApp** as a server context when you are prompted.
- (Optional) Select the settings to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. If you choose to set up this bridge, you must specify the SAS Viya host name, the SAS Viya SAS/CONNECT Spawner port, and the credentials.

If you choose not to set up the bridge when you are migrating to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later. For more information about setting up the bridge later, see “Performing Post-installation Tasks” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

The migration handles the data migration from SAS Forecast Analyst Workbench 5.1 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 format. This includes data transformations to be made on SAS data and converting the MySQL tables to PostgreSQL tables.

Confirm Installation of Hot Fixes

After you have used the SAS tools to migrate your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-migration Tasks

About Post-Migration Tasks

Immediately after you perform the migration of SAS Forecast Analyst Workbench 5.1 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must perform the post-migration tasks. Do not perform the post-installation tasks that are described in *SAS Forecast Analyst Workbench 5.3: Administrator’s Guide*.

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm>.

Confirm the Presence of a SAS Forecast Analyst Workbench User

Confirm that a solution-specific operating-system user that existed on the source system is also present on the target system. Each of these users must be a member of the SAS Server Users group on Windows or must be a member of the group that the installation user belongs to on UNIX.

For more information about users and groups, see “Setting Up Users, Groups, and Ports” in *SAS Intelligence Platform: Installation and Configuration Guide*. The document is available at <http://support.sas.com/documentation/cdl/en/biig/69172/HTML/default/viewer.htm>.

Assign Users' Permissions on Windows

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server. You must assign the users Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the `GL_DATA_STORAGE_PATH` configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the `GL_DDF_ARCHIVE_ROOT_DIR_PATH` configuration parameter
- the forecasting-related logs folder that is referenced in the `GL_FORECAST_LOG_PATH` configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the `GL_DDCF_LOG_PATH` configuration parameter
- the SAS Financial Management data folder that is located at `SAS-configuration-directory/Levn/SASApp/Data`

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element `SAS-configuration-directory` represents the default SAS configuration directory. For example, on a Windows machine, this location can be `C:\SAS\Config\Lev1`. If your SAS configuration directory is in a different location, update this path accordingly.

Assign Users' Permissions on UNIX

In a UNIX operating system environment, several SAS script files must contain a `umask` setting to ensure that SAS users have the necessary Write permissions to the tables that the SAS Workspace Server and the SAS Stored Process Server create.

If you allowed the SAS Deployment Wizard to assign SAS users permissions on UNIX system for you, verify that there is a `umask` setting of at least `002` in the following SAS script files. If you did not allow the SAS Deployment Wizard to make these settings for you, you must specify a `umask` setting of at least `002` in these files.

- `SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh`

After you update these files with the `umask` setting, you must restart the object spawner.

Update SAS Metadata User Groups

The groups in SAS Forecast Analyst Workbench 5.1 are migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3 environment. However, you must add the members of the groups in SAS Forecast Analyst Workbench 5.1 groups to the groups in the first maintenance release of SAS Forecast Analyst Workbench 5.3.

To update the user groups:

- 1 Add the members of the groups in SAS Forecast Analyst Workbench 5.1 to the groups in the first maintenance release of SAS Forecast Analyst Workbench 5.3.

The following table helps you map the groups.

Table 1.1 Mapping User Groups

Groups in SAS Forecast Analyst Workbench 5.1	Groups in the first maintenance release of SAS Forecast Analyst Workbench 5.3
Analyst	Forecast Analyst Analysis Users
Planning	Forecast Analyst Planning Users
-	Forecast Analyst Process Administration Users
ETL Users	Forecast Analyst ETL Users
Forecast Analyst — MSOL Users Group	Forecast Analyst Database Users

- 2 Run `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` through SAS Data Integration Studio.

The migration job performs the following tasks:

- transforms the data structures of SAS Forecast Analyst Workbench 5.1 to the first maintenance release of SAS Forecast Analyst Workbench 5.3
- updates the mapping of users and groups in the migrated environment with the data in the solution

Note: If you do not have modeling projects that were created on the source environment and you run the `faw_1101_data_migration` job on the migrated environment, you can ignore the following warning:

```
WARNING: INTO Clause :p11 through :p10 does not specify a valid sequence of macro variables.
```

- 3 If groups in SAS Forecast Analyst Workbench 5.1 were authorized to smart objects, authorize the corresponding groups in the first maintenance release of SAS Forecast Analyst Workbench 5.3 to smart objects.

For more information, see “Assigning Permissions to a User or Group for a Forecast, for a Modeling Project, or for a Plan” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

- 4 Delete the SAS Forecast Analyst Workbench 5.1 groups.

Update the PLAN_DETAILS Table in the UIART Library

If a forecast is scheduled to run in batch mode on a source system, delete the next scheduled run date and time value of that forecast from the SCHEDULE_NEXT_RUN_DTTM column in the UIART.PLAN_DETAILS table on the migrated system.

Update the CONFIG.DIM_TABLE_LIST and CONFIG.TIME_DIM_HIERARCHY_LVL Tables

To update the CONFIG.DIM_TABLE_LIST and CONFIG.TIME_DIM_HIERARCHY_LVL tables after migration:

- 1 ■ Edit the PROD_SUCC_IND and ORDER_DIM columns of the CONFIG.DIM_TABLE_LIST table to meet your business requirements.

After migration is performed, the PROD_SUCC_IND and ORDER_DIM columns are added to the CONFIG.DIM_TABLE_LIST table. The PROD_SUCC_IND column is used for product succession in the Administration workspace in the user interface. By default, the PROD_SUCC_IND column is set to 1. The ORDER_DIM column contains the order in which the dimensions are displayed in the user interface while relationships are added in the Administration workspace. By default, the ORDER_DIM column contains values taken from DIM_RK.

Edit the PROD_SUCC_IND and ORDER_DIM columns of the CONFIG.DIM_TABLE_LIST table.

After migration, ensure that the PROD_SUCC_IND and ORDER_DIM columns contain values that meet your business requirement. For more information about the CONFIG.DIM_TABLE_LIST table, see *SAS Forecast Analyst Workbench: Administrator’s Guide*.
- Edit the DEFAULT_PAST_PERIODS and DEFAULT_FUTURE_PERIODS columns of the CONFIG.TIME_DIM_HIERARCHY_LVL table to meet your business requirements.

After migration is performed, the DEFAULT_PAST_PERIODS and DEFAULT_FUTURE_PERIODS columns are added to the CONFIG.TIME_DIM_HIERARCHY_LVL table. The DEFAULT_PAST_PERIODS column contains null values. You must enter values into the DEFAULT_PAST_PERIODS and DEFAULT_FUTURE_PERIODS columns.

The following table shows the sample values that the DEFAULT_PAST_PERIODS and DEFAULT_FUTURE_PERIODS columns can contain:

Hierarchy level periodicity	History periods (in terms of the hierarchy level periodicity)	Future periods (in terms of the hierarchy level periodicity)
CAL_YR (Year)	3	3
CAL_QTR (Quarter)	12	12
CAL_MTH (Month)	12	12
CAL_DAY (Day)	12	12
CAL_WK (Week)	12	12

Note: The history periods and future periods must be defined for all hierarchy level periodicities.

2 Run the following SAS Data Integration Studio jobs:

- /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave02
- /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave03

Ensure that the changes that you make in the configuration tables are reflected in the tables for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For more information about the ongoing jobs, see *SAS Forecast Analyst Workbench: Administrator's Guide*.

Update SAS Forecast Studio Projects

- 1 If you created modeling projects in SAS Forecast Analyst Workbench 5.1, register SAS Forecast Studio 14.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 environment:
 - a Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.
 - b On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
 - c Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
 - d Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.
 - e In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as **SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ**
 - specify the reports folder as **/System/Applications/SAS Forecast Server/Forecast Server 14.2**

Ensure that this path is the path that is specified in the `GL_FS_PROJ_DATA_STORAGE_PATH` parameter. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

- select the **Automatically register all projects within this environment** check box

f Click **OK**.

2 Depending on whether the plan created in SAS Forecast Analyst Workbench 5.1 contained independent variables, perform the one of the following actions as a forecast analyst:

- If the plan did not contain independent variables, you do not need to take any additional action. The modeling project for this plan was created on the source system, and is migrated to the target system.
- If the plan did contain independent variables, you must re-create the modeling project on the target system. This project is not migrated to the target system.

Note: The **Details** pane of the Forecasts category displays whether the selected plan contains independent variables. For more information, see *SAS Forecast Analyst Workbench: User's Guide*.

Events That Contain Missing Data

When both the `_KEYNAME_` and `_STARTDATE_` columns in the `CONFIG.CREATE_EVENT` table contain missing values, the respective event record is deleted from the `CONFIG.CREATE_EVENT` and `CONFIG.EVENT_REQUIRED` tables. These types of event records are stored in the `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION_EVENTS_REQD` tables, respectively, for your reference. The `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION_EVENTS_REQD` tables are created if an exception occurs after you run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job.

Remove Consensus Plans

You cannot migrate consensus plans that were created in SAS Forecast Analyst Workbench 5.1 to the first maintenance release of SAS Forecast Analyst Workbench 5.3. However, you must remove the data for consensus plans that were created for SAS Forecast Analyst Workbench 5.1 in SAS Financial Management in order for the collaboration process to run smoothly in the first maintenance release of SAS Forecast Analyst Workbench 5.3.

To remove the consensus plans data from SAS Financial Management:

- 1** In SAS Financial Management, remove the data for each consensus plan. You can delete the data of the consensus plan in the following sequence:
 - 1** form set
 - 2** phase
 - 3** model

4 cycle

5 dimensions that were created for SAS Forecast Analyst Workbench 5.1

For more information about deleting the form set and phase, see “Forms and the Forms Workspace” in *SAS Financial Management: Process Administrator's Guide*.

For more information about deleting the cycle, see “Cycles and Cycle Periods” in *SAS Financial Management: Process Administrator's Guide*.

For more information about deleting the model, see “Overview of Models” in *SAS Financial Management: Process Administrator's Guide*.

If the Stakeholder dimension was used previously, ensure that the updated data structure of the Stakeholder dimension is loaded and that all the required columns are populated. For example, at least one stakeholder referenced in the DEFAULT_STAKEHOLDER_IND column can be set to 1, and the other stakeholders must be set to 0.

2 Create empty data sets in the `stageFM` library of SAS Financial Management.

a Delete all tables that are present in the `stageFM` folder that is located at `SAS-configuration-directory\Levn\SASApp\Data\FinancialManagement\StageFM`.

Note: Make a backup copy of the tables that are in the `stageFM` folder before you delete them.

b Enter values for the macro variables and run the `<SASHome>\SASFoundation\9.4\finance\sasmacro path\ddlstgfm.sas` file in order to create the tables in the `stageFM` folder.

For example,

```
%let FM_DBCSMULT = 1;
%ddlstgfm(LIBREF=stagefm, DTTMFMT=DATETIME21., DTFMT=DATE9.);
```

Note: The parameter `FM_DBCSMULT` is a double-byte character set (DBCS) multiplier. Set this value based on your particular environment.

3 Run `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave01 (Initial One Time)/faw_0102_load_time_dim` through SAS Data Integration Studio.

4 Run the ETL jobs in the following sequence to integrate with SAS Financial Management:

1 `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave04 (FM Integration - Configuration)/faw_0401_generate_fm_config_tables`

2 `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)/faw_0501_load_fm_stg_config_tables`

3 `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)/faw_0502_load_fm_sdm_data_locale`

4 `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)/faw_0503_create_fm_sdm_dimension_types`

5 `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)/faw_0504_create_fm_sdm_dimensions`

- 5 After the data is loaded to solution data layer, run the following ongoing jobs to integrate with SAS Financial Management:
 - 1 /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)/faw_0601_load_fm_stg_dimensions
 - 2 /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)/faw_0602_load_fm_sdm_users
 - 3 /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)/faw_0603_load_fm_sdm_groups
 - 4 /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)/faw_0604_load_fm_sdm_users_x_groups
 - 5 /Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)/faw_0605_load_fm_sdm_dimensions

For more information about running the ETL jobs, see *SAS Forecast Analyst Workbench: Administrator's Guide*.

Use of Seeding Templates

Do not use the seeding templates that are in SAS Forecast Analyst Workbench 5.1. Seeding templates for the first maintenance release of SAS Forecast Analyst Workbench 5.3 are located at `SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/templates`. You can manually make any changes in seeding templates that are created in the first maintenance release of SAS Forecast Analyst Workbench 5.3 so that they match the seeding the templates in SAS Forecast Analyst Workbench 5.1, and then ensure that the ANALYSIS_VAR_X_LOAD_TYPE table contains values that meet your business requirements.

For more information about seeding, see *SAS Forecast Analyst Workbench: Administrator's Guide*.

Update Reports

Update the Library References for Reports Created in SAS Web Report Studio

If you created reports by using SAS Web Report Studio in SAS Forecast Analyst Workbench 5.1 and then you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update the references of all libraries in the respective SAS Information Maps.

To update the library references for reports that you created in SAS Web Report Studio:

- 1 In SAS Information Map Studio, select **File** ► **Open**. In the Open window, select the required data set to open the report.
- 2 In the Selected Resources pane, right-click the report, and select **Resource Replacement**. The Resource Replacement window appears.
- 3 In the left pane of the Resource Replacement window, click **Libraries**.
- 4 In the right pane of the Resource Replacement window, select the replacement library in the list to remove the library reference errors.

- 5 Click **OK**.

After you update the latest names of all libraries, the reports become available.

Run the ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from SAS Forecast Analyst Workbench 5.1 and you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update those reports.

- 1 Start the SAS LASR Analytic server.
- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)`:
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/ faw_1001_upload_to_LASR`

Update the NPF Projects

If SAS Forecast Analyst Workbench 5.1 contained new product forecasting projects, ensure that you enter the following information in the `UIART.PRODUCT_KPI_LIST` table after migration:

- information about the user who created the NPF projects in the `created_by` column
- date on which the NPF project was created and modified in the `created_date` and `modified_date` columns respectively

Update Configuration Parameters

After you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must verify that the values in the configuration parameters meet your business requirements. If any new parameters were added in the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can update them. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.

- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;  
%ddcf_validate_viya_parameters;
```

- 3 Click **Run**. The Log On - SAS App dialog box appears.

- 4 Enter user ID and password, and then click **OK**.

Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.

- 5 Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

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Migrate 5.2 to the First Maintenance Release of 5.3

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Pre-migration Tasks

Prerequisites for Migrating 5.2 to the First Maintenance Release of 5.3

When you are migrating SAS Forecast Analyst Workbench 5.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, the following prerequisites apply:

- You must be familiar with the SAS 9.4 installation and configuration processes. For more information, see <http://support.sas.com/documentation/installcenter/94/index.html>.
- Review the system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3. The detailed system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3 are available at <http://support.sas.com/documentation/installcenter/en/ikforecstanofrndmsr/69170/HTML/default/index.html>.
- Review the instructions described in *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.
- Ensure that you comply with the SAS 9.4 system requirements. For more requirements information, see “SAS 9.4 System Requirements” at <http://support.sas.com/resources/sysreq/index.html>.
- Ensure that the operating system users and groups that exist on the source system also exist on the target system in order to maintain consistency in file access permissions.
- Make a backup copy of *SAS-configuration-directory*\Levn\AppData\SASForecastAnalystWorkbench\data and UIART.
- If you have not run the following ETL jobs to integrate SAS Financial Management with SAS Forecast Analyst Workbench 5.2 and you plan to use SAS Financial Management after you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must run the following jobs on the source system before you update the migration properties file:
 - /Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave04 (FM Integration - Configuration)
 - /Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave05 (FM Integration - Initial One Time)
 - /Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave06 (FM Integration - Data Loading)

You can determine whether the ETL jobs that are related to SAS Financial Management have run by verifying the absence of the file *SAS-configuration-directory*\Levn\AppData\SASForecastAnalystWorkbench\data\scratch\members_time.sas7bdat. If this file is not present, you did not run these ETL jobs previously.

- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. In SAS Deployment Wizard, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before migrating SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

Update the Migration Properties File

To update the migration utility properties file:

- 1 Make a copy of the `smu.properties.template` file (that is available at `<SAS Software Depot>/utilities/smu94`) and save the copy with the name `smu.properties` at the same location.
- 2 Edit the `smu.properties` file as required by your deployment.

For more information, see *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

Migration Tasks

Create a Migration Package

On the source system that contains SAS Forecast Analyst Workbench 5.2, run the SAS Migration Utility. For instructions on how to run the SAS Migration Utility, see *SAS 9.4 Intelligence Platform: Migration Guide*. The guide is available at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

The analysis phase of the migration checks the version of the solution that you are migrating to, and then creates a migration package. The migration package is created at a location that you specified in the `SMU.Output.Dir` property in the `smu.properties` file.

The SAS Migration Utility also generates a report (`FullReport.html`) that shows whether the migration package was created successfully.

The report is generated at the following location:

- **On Windows:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`
- **On UNIX:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

Deploy the First Maintenance Release of 5.3 By Using the Migration Package

In order to deploy the first maintenance release of SAS Forecast Analyst Workbench 5.3 by using the migration package, choose the following settings in SAS Deployment Wizard:

- Select **Custom Configuration**.
- Select the **Perform Migration** check box, and then specify the path of the migration package that you created.
- Select **SASApp** as a server context when you are prompted.

- (Optional) Select the settings to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. If you choose to set up this bridge, you must specify the SAS Viya host name, the SAS Viya SAS/CONNECT Spawner port, and the credentials.

If you choose not to set up the bridge when you are migrating to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later. For more information about setting up the bridge later, see “Performing Post-installation Tasks” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

Confirm Installation of Hot Fixes

After you have used the SAS tools to migrate your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-migration Tasks

About Post-migration Tasks

Immediately after you perform the migration of SAS Forecast Analyst Workbench 5.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must perform the post-migration tasks. Do not perform the post-installation tasks that are described in *SAS Forecast Analyst Workbench 5.3: Administrator’s Guide*.

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm>.

Confirm the Presence of a SAS Forecast Analyst Workbench User

Confirm that a solution-specific operating-system user that existed on the source system is also present on the target system. Each of these users must be a member of the SAS Server Users group on Windows or must be a member of the group that the installation user belongs to on UNIX.

For more information about users and groups, see “Setting Up Users, Groups, and Ports” in *SAS Intelligence Platform: Installation and Configuration Guide*. The document is available at <http://support.sas.com/documentation/cdl/en/biig/69172/HTML/default/viewer.htm>.

Assign Users' Permissions on Windows

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server. You must assign the users Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the `GL_DATA_STORAGE_PATH` configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the `GL_DDF_ARCHIVE_ROOT_DIR_PATH` configuration parameter
- the forecasting-related logs folder that is referenced in the `GL_FORECAST_LOG_PATH` configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the `GL_DDCF_LOG_PATH` configuration parameter
- the SAS Financial Management data folder that is located at `SAS-configuration-directory/Levn/SASApp/Data`

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element `SAS-configuration-directory` represents the default SAS configuration directory. For example, on a Windows machine, this location can be `C:\SAS\Config\Lev1`. If your SAS configuration directory is in a different location, update this path accordingly.

Assign Users' Permissions on UNIX

In a UNIX operating system environment, several SAS script files must contain a `umask` setting to ensure that SAS users have the necessary Write permissions to the tables that the SAS Workspace Server and the SAS Stored Process Server create.

If you allowed the SAS Deployment Wizard to assign SAS users permissions on UNIX system for you, verify that there is a `umask` setting of at least `002` in the following SAS script files. If you did not allow the SAS Deployment Wizard to make these settings for you, you must specify a `umask` setting of at least `002` in these files.

- `SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh`

After you update these files with the `umask` setting, you must restart the object spawner.

Run the Migration Job

Run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job through SAS Data Integration Studio.

The migration job transforms the data structures of SAS Forecast Analyst Workbench 5.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3.

Note: If you do not have modeling projects that were created on the source environment and you run the `faw_1101_data_migration` job on the migrated environment, you can ignore the following warning:

```
WARNING: INTO Clause :pl1 through :pl0 does not specify a valid sequence of macro variables.
```

Update the PLAN_DETAILS Table in the UIART Library

If a forecast is scheduled to run in batch mode on a source system, delete the next scheduled run date and time value of that forecast from the `SCHEDULE_NEXT_RUN_DTTM` column in the `UIART.PLAN_DETAILS` table on the migrated system.

Events That Contain Missing Data

When both the `_KEYNAME_` and `_STARTDATE_` columns in the `CONFIG.CREATE_EVENT` table contain missing values, the respective event record is deleted from the `CONFIG.CREATE_EVENT` and `CONFIG.EVENT_REQUIRED` tables. For your reference, these types of event records are stored in the `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables, respectively. The `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables are created if an exception occurs after you run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job.

Update Reports

Update the Library References for Reports Created in SAS Web Report Studio

If you created reports by using SAS Web Report Studio in SAS Forecast Analyst Workbench 5.2 and then you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update the references of all libraries in the respective SAS Information Maps.

To update the library references for reports that you created in SAS Web Report Studio:

- 1 In SAS Information Map Studio, select **File** ► **Open**. In the Open window, select the required data set to open the report.

- 2 In the Selected Resources pane, right-click the report, and select **Resource Replacement**. The Resource Replacement window appears.
- 3 In the left pane of the Resource Replacement window, click **Libraries**.
- 4 In the right pane of the Resource Replacement window, select the replacement library in the list to remove the library reference errors.
- 5 Click **OK**.

After you update the latest names of all libraries, the reports become available.

Run the ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from SAS Forecast Analyst Workbench 5.2 and you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update those reports.

- 1 Start the SAS LASR Analytic server.
- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)`:
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/faw_1001_upload_to_LASR`

Update SAS Forecast Studio Projects

- 1 If you created modeling projects in SAS Forecast Analyst Workbench 5.2, register SAS Forecast Studio 14.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 environment:
 - a Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.
 - b On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
 - c Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
 - d Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.

- e In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as **SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ**
 - specify the reports folder as **/System/Applications/SAS Forecast Server/Forecast Server 14.2**

Ensure that this path is the path that is specified in the **GL_FS_PROJ_DATA_STORAGE_PATH** parameters. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

 - select the **Automatically register all projects within this environment** check box
- f Click **OK**.

- 2 Depending on whether the forecast created in SAS Forecast Analyst Workbench 5.2 contained independent variables, perform the one of the following actions as a forecast analyst:
 - If the forecast did not contain independent variables, you do not need to take any additional action. The modeling project for this forecast was created on the source system, and is migrated to the target system.
 - If the forecast did contain independent variables, you must re-create the modeling project on the target system. This project is not migrated to the target system.

Note: The **Details** pane of the Forecasts category displays whether the selected forecast contains independent variables. For more information, see *SAS Forecast Analyst Workbench: User's Guide*.

Update Collaboration Plans

When you performed collaboration planning in SAS Forecast Analyst Workbench 5.2, the **TIME_PERIOD_ID**, **TIME_PERIOD_DESC**, and **TIME_PERIOD_NM** columns in the **SDL_TIME_PERIOD** table contained the same values as the custom calendar. For this reason, the values in all the labeling methods of the form sets in SAS Financial Management appear to be the same. If you want the correct values (the values as they actually appear in your data) to appear in the labeling methods in SAS Financial Management, you must complete the following steps. Otherwise, the values that appear will not reflect the actual values.

CAUTION! If you complete these steps, then the plans that you created in SAS Forecast Analyst Workbench 5.2 will be lost. However, if you do not complete these steps, then the plans that you created in SAS Forecast Analyst Workbench 5.2 function correctly in the first maintenance release of SAS Forecast Analyst Workbench 5.3, though the data appears as described above.

Note: If you installed hot fix 5 for SAS Forecast Analyst Workbench 5.2, do not update the collaboration plans. The data will appear correctly.

To update the collaboration plans:

- 1 Load the time dimension. However, do not load a custom time dimension yet.
 - a Make a backup copy of the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables, and then delete them.
 - b Run the FAW_0102_LOAD_TIME_DIM job in order to load the default time dimension.

You must edit the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables with the information that meets your business requirement. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.
 - c (Optional) Load the custom time dimension.

In order to load the custom time dimension and the default calendar, complete the steps in the appendix "Adding a Calendar for Collaboration" in *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*. You must edit the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables with the information that meets your business requirements.
- 2 Delete all data in SAS Financial Management that is being used by SAS Forecast Analyst Workbench.
 - a Delete all plans for all users by using the user interface of SAS Forecast Analyst Workbench.
 - b In SAS Financial Management, ensure that no cycles are present.
 - c In SAS Financial Management, delete any dimensions that are specific to SAS Forecast Analyst Workbench.
 - d Ensure that the schema and schema_x_dimension tables in the `scratch` library of SAS Forecast Analyst Workbench are empty.
- 3 Create empty data sets in the `stageFM` library of SAS Financial Management.
 - a Make a backup copy of all the tables in the `stageFM` folder that is located at `SAS-Configuration-directory\Lev<n>\SASApp\Data\FinancialManagement\StageFM`, and then delete the tables.
 - b Enter values for the macro variables, and then run the `<SASHome>\SASFoundation\9.4\finance\sasmacro path\ddlstgfm.sas` file in order to create the tables in the `stageFM` folder.

For example,

```
%let FM_DBCSMULT = 1;
%ddlstgfm(LIBREF=stagefm, DTTMFMT=DATETIME21., DTFMT=DATE9.);
```

Note: The parameter FM_DBCSMULT is a double-byte character set (DBCS) multiplier. Set this value based on your particular environment.
- 4 Run the jobs that are in the following folders in SAS Data Integration Studio to integrate SAS Financial Management with SAS Forecast Analyst Workbench:
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)`

- `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)`

Update Configuration Parameters

After you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must verify that the values in the configuration parameters meet your business requirements. If any new parameters were added in the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can update them. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Update the NPF Projects

If SAS Forecast Analyst Workbench 5.2 contained new product forecasting projects, ensure that you enter the following information in the UIART.PRODUCT_KPI_LIST table after migration:

- information about user who created the NPF projects in the `created_by` column
- date on which the NPF project was created and modified in the `created_date` and `modified_date` columns respectively.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.
- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;
```

```
%ddcf_validate_viya_parameters;
```

- 3** Click **Run**. The Log On - SAS App dialog box appears.
- 4** Enter user ID and password, and then click **OK**.
Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.
- 5** Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

3

Migrate the Second Maintenance Release of 5.2 to the First Maintenance Release of 5.3

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Pre-migration Tasks

Prerequisites for Migrating the Second Maintenance Release of 5.2 to the First Maintenance Release of 5.3

When you are migrating the second maintenance release of SAS Forecast Analyst Workbench 5.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, the following prerequisites apply:

- You must be familiar with the SAS 9.4 installation and configuration processes. For more information, see <http://support.sas.com/documentation/installcenter/94/index.html>.
- Review the system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3. The detailed system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3 are available at <http://support.sas.com/documentation/installcenter/en/ikforecstanofrndmsr/69170/HTML/default/index.html>.
- Review the instructions described in *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.
- Ensure that you comply with the SAS 9.4 system requirements. For more requirements information, see “SAS 9.4 System Requirements” at <http://support.sas.com/resources/sysreq/index.html>.
- Ensure that the operating system users and groups that exist on the source system also exist on the target system in order to maintain consistency in file access permissions.
- Make a backup copy of `SAS-configuration-directory\Levn\AppData\SASForecastAnalystWorkbench\data` and UIART.
- If you have not run the following ETL jobs to integrate SAS Financial Management with the second maintenance release of SAS Forecast Analyst Workbench 5.2 and you plan to use SAS Financial Management after you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must run the following jobs on the source system before you update the migration properties file:
 - `/Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave04 (FM Integration - Configuration)`
 - `/Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave05 (FM Integration - Initial One Time)`
 - `/Products/SAS Forecast Analyst Workbench/5.2 Jobs/Wave06 (FM Integration - Data Loading)`

You can determine whether the ETL jobs that are related to SAS Financial Management have run by verifying the absence of the file `SAS-configuration-directory\Levn\AppData\SASForecastAnalystWorkbench\data\scratch`

`\members_time.sas7bdat`. If this file is not present, you did not run these ETL jobs previously.

- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. In SAS Deployment Wizard, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before migrating SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

Update the Migration Properties File

To update the migration utility properties file:

- 1 Make a copy of the `smu.properties.template` file (that is available at *<SAS Software Depot>/utilities/smu94*) and save the copy with the name `smu.properties` at the same location.
- 2 Edit the `smu.properties` file as required by your deployment.

For more information, see *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

Migration Tasks

Create a Migration Package

On the source system that contains the second maintenance release of SAS Forecast Analyst Workbench 5.2, run the SAS Migration Utility. For instructions on how to run the SAS Migration Utility, see *SAS 9.4 Intelligence Platform: Migration Guide*. The guide is available at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

The analysis phase of the migration checks the version of the solution that you are migrating to, and then creates a migration package. The migration package is created at a location that you specified in the `SMU.Output.Dir` property in the `smu.properties` file.

The SAS Migration Utility also generates a report (`FullReport.html`) that shows whether the migration package was created successfully.

The report is generated at the following location:

- **On Windows:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

- **On UNIX:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

Deploy the First Maintenance Release of 5.3 By Using the Migration Package

In order to deploy the first maintenance release of SAS Forecast Analyst Workbench 5.3 by using the migration package, choose the following settings in SAS Deployment Wizard:

- Select **Custom Configuration**.
- Select the **Perform Migration** check box, and then specify the path of the migration package that you created.
- Select **SASApp** as a server context when you are prompted.
- (Optional) Select the settings to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. If you choose to set up this bridge, you must specify the SAS Viya host name, the SAS Viya SAS/CONNECT Spawner port, and the credentials.

If you choose not to set up the bridge when you are migrating to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later. For more information about setting up the bridge later, see “Performing Post-installation Tasks” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

Confirm Installation of Hot Fixes

After you have used the SAS tools to migrate your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-migration Tasks

About Post-migration Tasks

Immediately after you migrate from the second maintenance release of SAS Forecast Analyst Workbench to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must perform the post-migration tasks. Do not perform the post-installation tasks that are described in *SAS Forecast Analyst Workbench 5.3: Administrator’s Guide*.

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://>

support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm.

Confirm the Presence of a SAS Forecast Analyst Workbench User

Confirm that a solution-specific operating-system user that existed on the source system is also present on the target system. Each of these users must be a member of the SAS Server Users group on Windows or must be a member of the group that the installation user belongs to on UNIX.

For more information about users and groups, see “Setting Up Users, Groups, and Ports” in *SAS Intelligence Platform: Installation and Configuration Guide*. The document is available at <http://support.sas.com/documentation/cdl/en/biig/69172/HTML/default/viewer.htm>.

Assign Users' Permissions on Windows

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server. You must assign the users Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the `GL_DATA_STORAGE_PATH` configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the `GL_DDF_ARCHIVE_ROOT_DIR_PATH` configuration parameter
- the forecasting-related logs folder that is referenced in the `GL_FORECAST_LOG_PATH` configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the `GL_DDCF_LOG_PATH` configuration parameter
- the SAS Financial Management data folder that is located at `SAS-configuration-directory/Levn/SASApp/Data`

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element `SAS-configuration-directory` represents the default SAS configuration directory. For example, on a Windows machine, this location can be `C:\SAS\Config\Lev1`. If your SAS configuration directory is in a different location, update this path accordingly.

Assign Users' Permissions on UNIX

In a UNIX operating system environment, several SAS script files must contain a `umask` setting to ensure that SAS users have the necessary Write permissions to the tables that the SAS Workspace Server and the SAS Stored Process Server create.

If you allowed the SAS Deployment Wizard to assign SAS users permissions on UNIX system for you, verify that there is a `umask` setting of at least `002` in the following SAS script files. If you did not allow the SAS Deployment Wizard to make these settings for you, you must specify a `umask` setting of at least `002` in these files.

- `SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh`

After you update these files with the umask setting, you must restart the object spawner.

Run the Migration Job

Run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job through SAS Data Integration Studio.

The migration job transforms the data structures of the second maintenance release of SAS Forecast Analyst Workbench 5.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3.

Note: If you do not have modeling projects that were created on the source environment and you run the `faw_1101_data_migration` job on the migrated environment, you can ignore the following warning:

WARNING: INTO Clause :p11 through :p10 does not specify a valid sequence of macro variables.

Update the PLAN_DETAILS Table in the UIART Library

If a forecast is scheduled to run in batch mode on a source system, delete the next scheduled run date and time value of that forecast from the `SCHEDULE_NEXT_RUN_DTTM` column of the `UIART.PLAN_DETAILS` table on the target system.

Events That Contain Missing Data

When both the `_KEYNAME_` and `_STARTDATE_` columns in the `CONFIG.CREATE_EVENT` table contain missing values, the respective event record is deleted from the `CONFIG.CREATE_EVENT` and `CONFIG.EVENT_REQUIRED` tables. For your reference, these types of event records are stored in the `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables, respectively. The `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables are created if an exception occurs after you run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job.

Run the ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from the second maintenance release of SAS Forecast Analyst Workbench 5.2 and you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update those reports.

- 1 Start the SAS LASR Analytic server.
- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation):`
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/ faw_1001_upload_to_LASR`

Register the Most Recent Version of SAS Forecast Studio

If you created modeling projects in the second maintenance release of SAS Forecast Analyst Workbench 5.2, then you must register SAS Forecast Studio 14.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 environment:

- 1 Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.
- 2 On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
- 3 Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
- 4 Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.
- 5 In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as **SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ**

- specify the reports folder as `/System/Applications/SAS Forecast Server/Forecast Server 14.2`

Ensure that this path is the path that is specified in the `GL_FS_PROJ_DATA_STORAGE_PATH` parameter. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

- select the **Automatically register all projects within this environment** check box

6 Click **OK**.

Update Collaboration Plans

When you performed collaboration planning in the second maintenance release of SAS Forecast Analyst Workbench 5.2, the `TIME_PERIOD_ID`, `TIME_PERIOD_DESC`, and `TIME_PERIOD_NM` columns in the `SDL_TIME_PERIOD` table contained the same values as the custom calendar. For this reason, the values in all the labeling methods of the form sets in SAS Financial Management appear to be the same. If you want the correct values (the values as they actually appear in your data) to appear in the labeling methods in SAS Financial Management, you must complete the following steps. Otherwise, the values that appear will not reflect the actual values.

CAUTION! If you complete these steps, then the plans that you created in the second maintenance release of SAS Forecast Analyst Workbench 5.2 will be lost. However, if you do not complete these steps, then the plans that you created in the second maintenance release of SAS Forecast Analyst Workbench 5.2 function correctly in the first maintenance release of SAS Forecast Analyst Workbench 5.3, though the data appears as described above.

To update the collaboration plans:

1 Load the time dimension. However, do not load a custom time dimension yet.

- a Delete the `CONFIG.TIME_DIM_HIERARCHY` and `CONFIG.TIME_DIM_HIERARCHY_LVL` tables.

Make a backup copy of the `CONFIG.TIME_DIM_HIERARCHY` and `CONFIG.TIME_DIM_HIERARCHY_LVL` tables before you delete them.

- b Run the `FAW_0102_LOAD_TIME_DIM` job in order to load the default time dimension.

You must edit the `CONFIG.TIME_DIM_HIERARCHY` and `CONFIG.TIME_DIM_HIERARCHY_LVL` tables with the information that meets your business requirement. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

- c (Optional) Load the custom time dimension.

In order to load the custom time dimension and the default calendar, complete the steps in the appendix "Adding a Calendar for Collaboration" in *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*. You must edit the `CONFIG.TIME_DIM_HIERARCHY` and `CONFIG.TIME_DIM_HIERARCHY_LVL` tables with the information that meets your business requirements.

- 2 Delete all data in SAS Financial Management that is being used by SAS Forecast Analyst Workbench.
 - a Delete all plans for all users by using the user interface of SAS Forecast Analyst Workbench.
 - b In SAS Financial Management, ensure that no cycles are present.
 - c In SAS Financial Management, delete any dimensions that are specific to SAS Forecast Analyst Workbench.
 - d Ensure that the schema and schema_x_dimension tables in the `scratch` library of SAS Forecast Analyst Workbench are empty.

- 3 Create empty data sets in the `stageFM` library of SAS Financial Management.
 - a Delete all tables that are present in the `stageFM` folder that is located at `SAS-Configuration-directory\Lev<n>\SASApp\Data\FinancialManagement\StageFM`.

Note: Make a backup copy of the tables that are in the `stageFM` folder before you delete them.
 - b Enter values for the macro variables and run the `<SASHome>\SASFoundation\9.4\finance\sasmacro path\ddlstgfm.sas` file in order to create the tables in the `stageFM` folder.

For example,

```
%let FM_DBCSMULT = 1;
%ddlstgfm(LIBREF=stagefm, DTTMFMT=DATETIME21., DTFMT=DATE9.);
```

Note: The parameter `FM_DBCSMULT` is a double-byte character set (DBCS) multiplier. Set this value based on your particular environment.

- 4 Run the jobs that are in the following folders in SAS Data Integration Studio to integrate SAS Financial Management with SAS Forecast Analyst Workbench:
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)`

Update the NPF Projects

If the second maintenance release of SAS Forecast Analyst Workbench 5.2 contained new product forecasting projects, ensure that you enter the following information in the `UIART.PRODUCT_KPI_LIST` table after migration:

- information about user who created the NPF projects in the `created_by` column
- date on which the NPF project was created and modified in the `created_date` and `modified_date` columns respectively.

Update Configuration Parameters

After you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must verify that the values in the configuration parameters meet your business requirements. If any new parameters were added in the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can update them. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.
- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;
%ddcf_validate_viya_parameters;
```

- 3 Click **Run**. The Log On - SAS App dialog box appears.
- 4 Enter user ID and password, and then click **OK**.

Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.

- 5 Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

4

Migrate 5.3 to the First Maintenance Release of 5.3

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Pre-migration Tasks

Prerequisites for Migrating 5.3 to the First Maintenance Release of 5.3

When you are migrating SAS Forecast Analyst Workbench 5.3 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, the following prerequisites apply:

- You must be familiar with the SAS 9.4 installation and configuration processes. For more information, see <http://support.sas.com/documentation/installcenter/94/index.html>.

- Review the system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3. The detailed system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3 are available at <http://support.sas.com/documentation/installcenter/en/ikforecstanofrndmsr/69170/HTML/default/index.html>.
- Review the instructions described in *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.
- Ensure that you comply with the SAS 9.4 system requirements. For more requirements information, see “SAS 9.4 System Requirements” at <http://support.sas.com/resources/sysreq/index.html>.
- Ensure that the operating system users and groups that exist on the source system also exist on the target system in order to maintain the consistency in file access permissions.
- Make a backup copy of *SAS-configuration-directory\Levn\AppData\SASForecastAnalystWorkbench\data* and UIART.
- If you have not run the following ETL jobs to integrate SAS Financial Management with SAS Forecast Analyst Workbench 5.3 and you plan to use SAS Financial Management after you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must run the following jobs on the source system before you update the migration properties file:
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave04 (FM Integration - Configuration)`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)`

You can determine whether the ETL jobs that are related to SAS Financial Management have run by verifying the absence of the file *SAS-configuration-directory\Levn\AppData\SASForecastAnalystWorkbench\data\scratch\members_time.sas7bdat*. If this file is not present, you did not run these ETL jobs previously.

- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. In SAS Deployment Wizard, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before migrating SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

Update the Migration Properties File

To update the migration utility properties file:

- 1 Make a copy of the `smu.properties.template` file (that is available at `<SAS Software Depot>/utilities/smu94`) and save the copy with the name `smu.properties` at the same location.
- 2 Edit the `smu.properties` file as required by your deployment.

For more information, see *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

Migration Tasks

Create a Migration Package

On the source system that contains SAS Forecast Analyst Workbench 5.3, run the SAS Migration Utility. For instructions on how to run the SAS Migration Utility, see *SAS 9.4 Intelligence Platform: Migration Guide*. The guide is available at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

The analysis phase of the migration checks the version of the solution that you are migrating to, and then creates a migration package. The migration package is created at a location that you specified in the `SMU.Output.Dir` property in the `smu.properties` file.

The SAS Migration Utility also generates a report (`FullReport.html`) that shows whether the migration package was created successfully.

The report is generated at the following location:

- **On Windows:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`
- **On UNIX:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

Deploy the First Maintenance Release of 5.3 By Using the Migration Package

In order to deploy the first maintenance release of SAS Forecast Analyst Workbench 5.3 by using the migration package, choose the following settings in SAS Deployment Wizard:

- Select **Custom Configuration**.
- Select the **Perform Migration** check box, and then specify the path of the migration package that you created.
- Select **SASApp** as a server context when you are prompted.
- (Optional) Select the settings to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. If you choose to set up this bridge, you must specify the SAS Viya host name, the SAS Viya SAS/CONNECT Spawner port, and the credentials.

If you choose not to set up the bridge when you are migrating to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later. For more information about setting up the bridge later, see “Performing Post-installation Tasks” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

Confirm Installation of Hot Fixes

After you have used the SAS tools to migrate your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-migration Tasks

About Post-migration Tasks

Immediately after you migrate from SAS Forecast Analyst Workbench 5.3 to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must perform the post-migration tasks. Do not perform the post-installation tasks that are described in the first maintenance release of *SAS Forecast Analyst Workbench 5.3: Administrator’s Guide*.

The post-migration tasks are described in detail in this chapter.

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm>.

Confirm the Presence of a SAS Forecast Analyst Workbench User

Confirm that a solution-specific operating-system user that existed on the source system is also present on the target system. Each of these users must be a member of the SAS Server Users group on Windows or must be a member of the group that the installation user belongs to on UNIX.

For more information about users and groups, see “Setting Up Users, Groups, and Ports” in *SAS Intelligence Platform: Installation and Configuration Guide*. The document is available at <http://support.sas.com/documentation/cdl/en/biig/69172/HTML/default/viewer.htm>.

Assign Users’ Permissions on Windows

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server.

You must assign the users Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the `GL_DATA_STORAGE_PATH` configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the `GL_DDF_ARCHIVE_ROOT_DIR_PATH` configuration parameter
- the forecasting-related logs folder that is referenced in the `GL_FORECAST_LOG_PATH` configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the `GL_DDCF_LOG_PATH` configuration parameter
- the SAS Financial Management data folder that is located at `SAS-configuration-directory/Levn/SASApp/Data`

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element `SAS-configuration-directory` represents the default SAS configuration directory. For example, on a Windows machine, this location can be `C:\SAS\Config\Lev1`. If your SAS configuration directory is in a different location, update this path accordingly.

Assign Users' Permissions on UNIX

In a UNIX operating system environment, several SAS script files must contain a `umask` setting to ensure that SAS users have the necessary Write permissions to the tables that the SAS Workspace Server and the SAS Stored Process Server create.

If you allowed the SAS Deployment Wizard to assign SAS users permissions on UNIX system for you, verify that there is a `umask` setting of at least `002` in the following SAS script files. If you did not allow the SAS Deployment Wizard to make these settings for you, you must specify a `umask` setting of at least `002` in these files.

- `SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh`
- `SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh`

After you update these files with the `umask` setting, you must restart the object spawner.

Run the Migration Job

Run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job through SAS Data Integration Studio.

The migration job transforms the data structures of SAS Forecast Analyst Workbench 5.3 to the first maintenance release of SAS Forecast Analyst Workbench 5.3.

Note: If you do not have modeling projects that were created on the source environment and you run the `faw_1101_data_migration` job on the migrated environment, you can ignore the following warning:

```
WARNING: INTO Clause :pl1 through :pl0 does not specify a valid sequence of macro variables.
```

Update the `PLAN_DETAILS` Table in the UIART Library

If a forecast is scheduled to run in batch mode on a source system, delete the next scheduled run date and time value of that forecast from the `SCHEDULE_NEXT_RUN_DTTM` column of the `UIART.PLAN_DETAILS` table on the target system.

Run the ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from SAS Forecast Analyst Workbench 5.3 and you migrated to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update those reports.

- 1 Start the SAS LASR Analytic server.
- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)`:
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/faw_1001_upload_to_LASR`

Register the Most Recent Version of SAS Forecast Studio

To register SAS Forecast Studio 14.2 to the first maintenance release of SAS Forecast Analyst Workbench 5.3 environment:

- 1 Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.

- 2 On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
- 3 Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
- 4 Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.
- 5 In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as **SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ**
 - specify the reports folder as **/System/Applications/SAS Forecast Server/Forecast Server 14.2**

Ensure that this path is the path that is specified in the **GL_FS_PROJ_DATA_STORAGE_PATH** parameters. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

 - select the **Automatically register all projects within this environment** check box
- 6 Click **OK**.

Update Configuration Parameters

After you migrate to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must verify that the values in the configuration parameters meet your business requirements. If any new parameters were added in the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can update them. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.
- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;  
%ddcf_validate_viya_parameters;
```
- 3 Click **Run**. The Log On - SAS App dialog box appears.
- 4 Enter user ID and password, and then click **OK**.
Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.
- 5 Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

5

Migrate the First Maintenance Release of 5.3 to a Target System

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Pre-migration Tasks

Prerequisites for Migrating the First Maintenance Release of 5.3 to a Target System

When you are migrating the first maintenance release of SAS Forecast Analyst Workbench 5.3 to a target system, the following prerequisites apply:

- You must be familiar with the SAS 9.4 installation and configuration processes. For more information, see <http://support.sas.com/documentation/installcenter/94/index.html>.
- Review the system requirements for the first maintenance release of SAS Forecast Analyst Workbench 5.3. The detailed system requirements for the

first maintenance release of SAS Forecast Analyst Workbench 5.3 are available at <http://support.sas.com/documentation/installcenter/en/ikforecstanofrndmsr/69170/HTML/default/index.html>.

- Review the instructions described in *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.
- Ensure that you comply with the SAS 9.4 system requirements. For more requirements information, see “SAS 9.4 System Requirements” at <http://support.sas.com/resources/sysreq/index.html>.
- Ensure that the operating system users and groups that exist on the source system also exist on the target system in order to maintain consistency in file access permissions.
- Make a backup of *SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data* and UIART.
- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. In SAS Deployment Wizard, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before migrating SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

Update the Migration Properties File

To update the migration utility properties file:

- 1 Make a copy of the `smu.properties.template` file (that is available at *<SAS Software Depot>/utilities/smu94*) and save the copy with the name `smu.properties` at the same location.
- 2 Edit the `smu.properties` file as required by your deployment.:

For more information, see *SAS 9.4 Intelligence Platform: Migration Guide* at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

Migration Tasks

Create a Migration Package

On the source system that contains the first maintenance release of SAS Forecast Analyst Workbench 5.3, run the SAS Migration Utility. For instructions on how to run the SAS Migration Utility, see *SAS 9.4 Intelligence Platform*:

Migration Guide. The guide is available at <http://support.sas.com/documentation/cdl/en/bimig/69173/HTML/default/viewer.htm>.

The analysis phase of the migration checks the version of the solution that you are migrating to, and then creates a migration package. The migration package is created at a location that you specified in the `SMU.Output.Dir` property in the `smu.properties` file.

The SAS Migration Utility also generates a report (`FullReport.html`) that shows whether the migration package was created successfully.

The report is generated at the following location:

- **On Windows:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`
- **On UNIX:** `<Output path specified in the smu.properties file>/<machine name>/AnalysisReport/`

Deploy the First Maintenance Release of 5.3 By Using the Migration Package

In order to deploy the first maintenance release of SAS Forecast Analyst Workbench 5.3 by using the migration package, choose the following settings in SAS Deployment Wizard:

- Select **Custom Configuration**.
- Select the **Perform Migration** check box, and then specify the path of the migration package that you created.
- Select **SASApp** as a server context when you are prompted.
- (Optional) Select the settings to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analyses. If you choose to set up this bridge, you must specify the SAS Viya host name, the SAS Viya SAS/CONNECT Spawner port, and the credentials.

If you choose not to set up the bridge when you are migrating to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later. For more information about setting up the bridge later, see “Performing Post-installation Tasks” in *SAS Forecast Analyst Workbench: Administrator’s Guide*.

Confirm Installation of Hot Fixes

After you have used the SAS tools to migrate your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-migration Tasks

About Post-migration Tasks

Immediately after you perform the migration of the first maintenance release of SAS Forecast Analyst Workbench 5.3 to a target system, you must perform the post-migration tasks. Do not perform the post-installation tasks that are described in *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

The post-migration tasks are described in detail in this chapter.

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm>.

Confirm the Presence of a SAS Forecast Analyst Workbench User

Confirm that a solution-specific operating-system user that existed on the source system is also present on the target system. Each of these users must be a member of the SAS Server Users group on Windows or must be a member of the group that the installation user belongs to on UNIX.

For more information about users and groups, see “Setting Up Users, Groups, and Ports” in *SAS Intelligence Platform: Installation and Configuration Guide*. The document is available at <http://support.sas.com/documentation/cdl/en/biig/69172/HTML/default/viewer.htm>.

Assign Users' Permissions on Windows

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server. You must assign the users Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the GL_DATA_STORAGE_PATH configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the GL_DDF_ARCHIVE_ROOT_DIR_PATH configuration parameter
- the forecasting-related logs folder that is referenced in the GL_FORECAST_LOG_PATH configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the GL_DDCF_LOG_PATH configuration parameter

- the SAS Financial Management data folder that is located at *SAS-configuration-directory/Levn/SASApp/Data*

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element *SAS-configuration-directory* represents the default SAS configuration directory. For example, on a Windows machine, this location can be `C:\SAS\Config\Lev1`. If your SAS configuration directory is in a different location, update this path accordingly.

Assign Users' Permissions on UNIX

In a UNIX operating system environment, several SAS script files must contain a umask setting to assure that SAS users have the necessary Write permissions to the tables that the SAS Workspace Server and the SAS Stored Process Server create.

If you allowed the SAS Deployment Wizard to assign SAS users permissions on UNIX system for you, verify that there is a umask setting of at least 002 in the following SAS script files. If you did not allow the SAS Deployment Wizard to make these settings for you, you must specify a umask setting of at least 002 in these files.

- *SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh*

After you update these files with the umask setting, you must restart the object spawner.

Update the PLAN_DETAILS Table in the UIART Library

If a forecast is scheduled to run in batch mode on a source system, delete the next scheduled run date and time value of that forecast from the SCHEDULE_NEXT_RUN_DTTM column of the UIART.PLAN_DETAILS table on the target system.

Run the ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from the first maintenance release of SAS Forecast Analyst Workbench 5.3 and you migrated to a different target system, you must update those reports.

- 1 Start the SAS LASR Analytic server.

- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)`:
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/faw_1001_upload_to_LASR`

Register the Most Recent Version of SAS Forecast Studio

To register the SAS Forecast Studio 14.2 environment to the target system:

- 1 Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.
- 2 On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
- 3 Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
- 4 Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.
- 5 In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as ***SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ***
 - specify the reports folder as ***/System/Applications/SAS Forecast Server/Forecast Server 14.2***

Ensure that this path is the path that is specified in the `GL_FS_PROJ_DATA_STORAGE_PATH` parameters. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

 - select the **Automatically register all projects within this environment** check box
- 6 Click **OK**.

Update Configuration Parameters

After you migrate to a target system, you must verify that the values in the configuration parameters meet your business requirements. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.
- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;
%ddcf_validate_viya_parameters;
```

- 3 Click **Run**. The Log On - SAS App dialog box appears.
- 4 Enter user ID and password, and then click **OK**.

Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.

- 5 Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

6

Upgrade to the First Maintenance Release of 5.3

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Introduction to Upgrading SAS Forecast Analyst Workbench

You can upgrade from any of the following previously installed version of SAS Forecast Analyst Workbench to the first maintenance release of SAS Forecast Analyst Workbench 5.3:

- SAS Forecast Analyst Workbench 5.2
- second maintenance release of SAS Forecast Analyst Workbench 5.2
- SAS Forecast Analyst Workbench 5.3

This chapter provides complete information about upgrading SAS Forecast Analyst Workbench.

Pre-upgrade Tasks

Before you upgrade to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must perform the following tasks:

- assess the effect of update on products at your site

Assessing the effect of update on products at your site includes reviewing the list of products that will be updated on a system. From SAS Deployment Wizard, generate a list of the product updates that SAS will apply to the current system. This list of product updates could vary for each machine at your site.

- make backups

Make a backup of the database and UIART, metadata (including the users that you created), and any customizations that you might have created.

- Prepare for using a bridge from SAS Forecast Analyst Workbench to SAS Viya

If you have access to SAS Viya, you might want to prepare a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/CONNECT to perform custom analysis. In SAS Deployment Manager, you can provide information about the SAS Viya deployment that will be used to establish the bridge. You must have the following information ready before upgrading to SAS Forecast Analyst Workbench:

- SAS Viya host name
- port number of SAS/CONNECT spawner that is present on SAS Viya
- credentials for accessing the SAS Viya

For more information about the pre-update tasks, see “Preparing Your Site for a Software Update” in *SAS 9.4 Guide to Software Updates* at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/PDF/default/whatsdiff.pdf>.

Upgrading SAS Forecast Analyst Workbench

You use the SAS Deployment Wizard to upgrade to the first maintenance release of SAS Forecast Analyst Workbench and related products that are included in your deployment. Depending on your SAS software order and the SAS installation data file, SAS Deployment Wizard prompts you to upgrade SAS Forecast Analyst Workbench and other related products.

Perform the SAS Deployment Wizard tasks in order to upgrade to the first maintenance release of SAS Forecast Analyst Workbench 5.3, and then perform the SAS Deployment Manager tasks to configure the first maintenance release of SAS Forecast Analyst Workbench 5.3.

In order to configure SAS Forecast Analyst Workbench for use with SAS Visual Analytics, select the default services that are related to SAS Visual Analytics in SAS Deployment Manager.

For more information, see *SAS 9.4 Guide to Software Updates* at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/PDF/default/whatsdiff.pdf>.

You might also want to select the settings required to set up a bridge from SAS Forecast Analyst Workbench to SAS Viya using SAS/Connect to perform custom analysis. If you choose to set up this bridge, you must specify the SAS Viya host name, SAS Viya SAS Connect Spawner port, and the credentials. If you choose not to set up the bridge while upgrading to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can set it up later.

Confirm Installation of Hot Fixes

After you have used the SAS tools to upgrade your software, install all hot fixes that are available for the first maintenance release of SAS Forecast Analyst Workbench 5.3. For a list of all hot fixes available for your solution, see <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

Post-upgrade Tasks

Complete Software Updates

Complete all the instructions that are described in the “Installing SAS 9.4” chapter of *SAS 9.4 Guide to Software Updates*. You must restart all SAS Web Application Servers after the servers are updated on all middle tier machines in the deployment. *SAS 9.4 Guide to Software Updates* is available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/HTML/default/viewer.htm>.

Verify Permissions on Windows for Users

On Windows, the users who are using SAS Forecast Analyst Workbench must exist as operating system users or must be a part of the domain of the server. You must verify that the users have Read, Write, and Modify permissions for the following folders on Windows:

- the SAS Forecast Analyst Workbench data folder that is referenced in the `GL_DATA_STORAGE_PATH` configuration parameter
- the SAS Forecast Analyst Workbench archive folder that is referenced in the `GL_DDF_ARCHIVE_ROOT_DIR_PATH` configuration parameter
- the forecasting-related logs folder that is referenced in the `GL_FORECAST_LOG_PATH` configuration parameter
- the SAS Forecast Analyst Workbench logs folder that is referenced in the `GL_DDCF_LOG_PATH` configuration parameter

- the SAS Financial Management data folder that is located at *SAS-configuration-directory/Levn/SASApp/Data*

Note: If you are not using collaboration planning, you do not need to provide permission to this folder.

Note: The element *SAS-configuration-directory* represents the default SAS configuration directory. For example, on a Windows machine, this location can be *c:\SAS\Config\Lev1*. If your SAS configuration directory is in a different location, update this path accordingly.

Verify Permissions on UNIX for Users

In a UNIX operating system environment, verify that the umask settings in the following SAS script files are at least 002 to ensure that the SAS users have the necessary Write permissions to the tables that the SAS the SAS Workspace Server and the SAS Stored Process Server create.

- *SAS-configuration-directory/Levn/SASApp/BatchServer/sasbatch_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/PooledWorkspaceServer/PooledWorkspaceServer_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/StoredProcessServer/StoredProcessServer_usermods.sh*
- *SAS-configuration-directory/Levn/SASApp/WorkspaceServer/WorkspaceServer_usermods.sh*

Run the Migration Job

After you complete any manual steps that are described in the *UpdateInstructions.html* file, run the */Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration* job through SAS Data Integration Studio. The job transforms the data structures to those of the first maintenance release of SAS Forecast Analyst Workbench 5.3.

Note: If you do not have modeling projects that were created on the source environment and you run the *faw_1101_data_migration* job on the migrated environment, you can ignore the following warning:

```
WARNING: INTO Clause :p11 through :p10 does not specify a valid sequence of macro variables.
```

Update the PLAN_DETAILS Table in the UIART Library

If a forecast is scheduled to run in batch mode before you upgrade, delete the next scheduled run date and time value of that forecast from the *SCHEDULE_NEXT_RUN_DTTM* column of the *UIART.PLAN_DETAILS* table after you upgrade.

Events That Contain Missing Data

When both the `_KEYNAME_` and `_STARTDATE_` columns in the `CONFIG.CREATE_EVENT` table contain missing values, the respective event record is deleted from the `CONFIG.CREATE_EVENT` and `CONFIG.EVENT_REQUIRED` tables. For your reference, these types of event records are stored in the `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables, respectively. The `CONFIG.MIGRATION_EXCEPTION_EVENTS` and `CONFIG.MIGRATION_EXCEPTION.EVENTS_REQD` tables are created if an exception occurs after you run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave11 (Migration)/faw_1101_data_migration` job.

Update Reports

Update the Library References for Reports Created in SAS Web Report Studio

If you created reports by using SAS Web Report Studio in SAS Forecast Analyst Workbench 5.2 and then you upgraded to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update the references of all libraries in the respective SAS Information Maps. Do not perform this task if you are upgrading from any version of SAS Forecast Analyst Workbench other than SAS Forecast Analyst Workbench 5.2.

To update the library references for reports created in SAS Web Report Studio:

- 1 In SAS Information Map Studio, select **File** ► **Open**. In the **Open** window, select the required data set to open the report.
- 2 In the Selected Resources pane, right-click the report, and select **Resource Replacement**. The Resource Replacement window appears.
- 3 In the left pane of the Resource Replacement window, click **Libraries**.
- 4 In the right pane of the Resource Replacement window, select the replacement library in the list to remove the library reference errors.
- 5 Click **OK**.

After you update the latest names of all libraries, the reports become available.

Run ETL Job for Reports Created in SAS Visual Analytics

If you have SAS Visual Analytics reports that use data from the previous release of SAS Forecast Analyst Workbench and you upgraded to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must update those reports.

- 1 Start the SAS LASR Analytic server.
- 2 Run the following jobs. You must run the `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation)` jobs to load the incremental data.

- `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave09 (VA Integration - Data Preparation):`
 - `faw_0901_actual_and_indepvars`
 - `faw_0902_timeseries`
 - `faw_0903_consensus_plan`
 - `faw_0904_create_config_for_outcomponent`
 - `faw_0905_outcomponent`
- `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave10 (VA integration - Data Upload to LASR)/`
`faw_1001_upload_to_LASR`

Update SAS Forecast Studio Projects

- 1 If you created modeling projects before you upgraded to the first maintenance release of SAS Forecast Analyst Workbench 5.3, register SAS Forecast Studio 14.2 to the SAS Forecast Analyst Workbench 5.3 environment:
 - a Log on to SAS Management Console as a user who can register SAS Forecast Studio 14.2.
 - b On the **Plug-ins** tab, select **Application Management** ► **Forecast Server** ► **FAW**.
 - c Right-click **FAW**, and select **Unregister**. The FAW environment unregisters.
 - d Right-click **Forecast Server**, and select **Register Environment**. The **Register Environment** dialog box appears.
 - e In the **Register Environment** dialog box, enter the following information:
 - specify the environment name as **FAW**
 - specify the host name as **SASApp - Logical Workspace Server**
 - specify the location as **SAS-configuration-directory/Levn/AppData/SASForecastAnalystWorkbench/data/FS_PROJ**
 - specify the reports folder as **/System/Applications/SAS Forecast Server/Forecast Server 14.2**

Ensure that this path is the path that is specified in the `GL_FS_PROJ_DATA_STORAGE_PATH` parameters. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

 - select the **Automatically register all projects within this environment** check box
 - f Click **OK**.
- 2 (For upgrading from SAS Forecast Analyst Workbench 5.2 only) If SAS Forecast Analyst Workbench 5.2 contained a forecast with independent variables, you must re-create the modeling project after you upgrade. This modeling project is not upgraded to the first maintenance release of SAS

Forecast Analyst Workbench 5.3. You must perform this step as a forecast analyst.

Note: Do not perform this step if you are upgrading from the second maintenance release of SAS Forecast Analyst Workbench 5.2 or from SAS Forecast Analyst Workbench 5.3.

Note: The **Details** pane of the Forecasts category displays whether the selected forecast contains independent variables. For more information, see *SAS Forecast Analyst Workbench: User's Guide*.

Update the Collaboration Plans

When you performed collaboration planning in SAS Forecast Analyst Workbench 5.2 or in the second maintenance release of SAS Forecast Analyst Workbench 5.2, the TIME_PERIOD_ID, TIME_PERIOD_DESC, and TIME_PERIOD_NM columns in the SDL_TIME_PERIOD table contained the same values as the custom calendar. For this reason, the values in all the labeling methods of the form sets in SAS Financial Management appear to be the same. If you want the correct values (the values as they actually appear in your data) to appear in the labeling methods in SAS Financial Management, you must complete the following steps. Otherwise, the values that appear will not reflect the actual values.

CAUTION! If you complete these steps, then the plans that you created in SAS Forecast Analyst Workbench 5.2 or in the second maintenance release of SAS Forecast Analyst Workbench 5.2 will be lost. However, if you do not complete these steps, then the plans that you created in those versions of SAS Forecast Analyst Workbench function correctly in the first maintenance release of SAS Forecast Analyst Workbench 5.3, though the data appears as described above.

Note: Do not update the collaboration plans if you installed hot fix 5 of SAS Forecast Analyst Workbench 5.2 or you are upgrading from SAS Forecast Analyst Workbench 5.3. The data will appear correctly.

To update the collaboration plans:

- 1 Load the time dimension. However, do not load a custom dimension yet.
 - a Make a backup copy of the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables, and then delete them.
 - b Run the FAW_0102_LOAD_TIME_DIM job in order to load the default time dimension.

You must edit the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables with the information that meets your business requirement. For more information, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

- c (Optional) Load the custom time dimension.

In order to load the custom time dimension in addition to the default calendar, perform the steps in the appendix "Adding a Calendar for Collaboration" in *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*. You must edit the CONFIG.TIME_DIM_HIERARCHY and CONFIG.TIME_DIM_HIERARCHY_LVL tables with the information that meets your business requirements.

- 2 Delete all data in SAS Financial Management that is being used by SAS Forecast Analyst Workbench.
 - a Delete all plans for all users by using the user interface of SAS Forecast Analyst Workbench.
 - b In SAS Financial Management, ensure that no cycles are present.
 - c In SAS Financial Management, delete any dimensions that are specific to SAS Forecast Analyst Workbench.
 - d Ensure that the schema and schema_x_dimension tables in the `scratch` library of SAS Forecast Analyst Workbench are empty.
- 3 Create empty data sets in the `stageFM` library of SAS Financial Management.
 - a Make a backup copy of all the tables that are present in the `stageFM` folder that is located at `SAS-Configuration-directory\Lev<n>\SASApp\Data\FinancialManagement\StageFM`, and then delete the tables.
 - b Enter values for the macro variables, and then run the `<SASHome>\SASFoundation\9.4\finance\sasmacro path\ddlstgfm.sas` file in order to create the tables in the `stageFM` folder.
For example,


```
%let FM_DBCSMULT = 1;
%ddlstgfm(LIBREF=stagefm, DTTMFMT=DATETIME21., DTFMT=DATE9.);
```

Note: The parameter `FM_DBCSMULT` is a double-byte character set (DBCS) multiplier. Set this value based on your particular environment.
- 4 Run the jobs that are in the following folders in SAS Data Integration Studio to integrate SAS Financial Management with SAS Forecast Analyst Workbench:
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave05 (FM Integration - Initial One Time)`
 - `/Products/SAS Forecast Analyst Workbench/5.3 Jobs/Wave06 (FM Integration - Data Loading)`

Update Configuration Parameters

After you upgrade to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must verify that the values in the configuration parameters meet your business requirements. If any new parameters were added in the first maintenance release of SAS Forecast Analyst Workbench 5.3, you can update them. For more information about configuration parameters, see *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*.

Update the NPF Projects

When you are upgrading from SAS Forecast Analyst Workbench 5.2 or from the second maintenance release of SAS Forecast Analyst Workbench 5.2 to the first

maintenance release of SAS Forecast Analyst Workbench 5.3, ensure that you enter the following information in the UIART.PRODUCT_KPI_LIST table:

- information about the user who created the NPF projects in the created_by column
- date on which the NPF project was created and modified in the created_date and modified_date columns respectively

Note: Do not update the NPF projects when you are upgrading from SAS Forecast Analyst Workbench 5.3 to the first maintenance release of SAS Forecast Analyst Workbench 5.3.

Update Groups and Roles Related to SAS Visual Analytics

After you upgrade to the first maintenance release of SAS Forecast Analyst Workbench 5.3, you must confirm that the SAS Forecast Analyst Workbench groups are members of the groups that are related to SAS Visual Analytics.

To confirm that SAS Forecast Analyst Workbench groups are members of the roles that are related to SAS Visual Analytics, perform the following tasks:

- 1 Log on to SAS Management Console as an unrestricted user (sasadm) or as a user who has the capability to update the groups.
- 2 On the **Plug-ins** tab, select **Environment Management** ► **User Manager**.
- 3 In the **User Manager** node, perform the following tasks.

Table 6.1 Update Groups and Roles Related to SAS Visual Analytics

Right-click on the following item, and then select Properties.	On the Members tab of the Properties dialog box, perform the following actions:
Visual Analytics: Administration role	Remove the Forecast Analyst Process Administration Users , Forecast Analyst Analysis Users , and Forecast Analyst ETL Users groups.
Visual Analytics: Analysis role	Remove the Forecast Analyst Process Administration Users , Forecast Analyst Analysis Users , and Forecast Analyst Planning Users groups.
Visual Analytics: Basic role	Remove the Forecast Analyst Process Administration Users , Forecast Analyst Analysis Users , and Forecast Analyst Planning Users groups.
Visual Analytics: Data Building role	Remove the Forecast Analyst Process Administration Users , Forecast Analyst Analysis Users , Forecast Analyst Planning Users , and Forecast Analyst ETL Users groups.

Right-click on the following item, and then select Properties.	On the Members tab of the Properties dialog box, perform the following actions:
Visual Analytics: Report Viewing role	Remove the Forecast Analyst Process Administration Users , Forecast Analyst Analysis Users , and Forecast Analyst Planning Users groups.
Visual Analytics Data Administrators group	Add the Forecast Analyst Analysis Users , Forecast Analyst ETL Users , and Forecast Analyst Process Administration Users groups.
Visual Data Builder Administrators group	Add the Forecast Analyst Analysis Users , Forecast Analyst ETL Users , Forecast Analyst Planning Users , and Forecast Analyst Process Administration Users groups.

- 4 Click **OK**.

Complete Tasks to Set Up a Bridge from SAS Forecast Analyst Workbench to SAS Viya

Start SAS/CONNECT Spawner on the SAS Viya Server

To start the SAS/CONNECT Spawner, perform the following steps:

- 1 In the command prompt, go to the directory where SAS/Connect Spawner is installed.

For example, go to `/opt/sas/viya/home/SASFoundation/utilities/bin`

- 2 In the command prompt, enter the following command: `./cntspawn -service port number directory where SAS is deployed`

For example, enter the following command when the port number is 17551 and SAS is deployed at `/opt/sas/viya/home/SASFoundation/sas`:

```
./cntspawn -service 17551 -sascmd /opt/sas/viya/home/SASFoundation/sas
```

Validate the SAS Viya Connection

Use the following steps to validate that the connection to SAS Viya is established:

- 1 In the SAS Data Integration Studio, go to **Tools** ► **Code Editor**.
- 2 In the Code Editor window, copy the following code:

```
options mlogic mprint symbolgen;
%ddcf_validate_viya_parameters;
```

- 3 Click **Run**. The Log On - SAS App dialog box appears.
- 4 Enter user ID and password, and then click **OK**.
Note: The user whose credentials you enter must have the **Metadata Server: Unrestricted** role.
- 5 Click the **Log** tab of the Code Editor window to check whether the connection to SAS Viya server is established.

Update the Path of SAS Forecast Server Repository

When you are upgrading the first maintenance release of SAS Forecast Analyst Workbench 5.3 from the fourth maintenance release of SAS 9.4 to the fifth maintenance release of SAS 9.4, you must update the path of SAS Forecast Server repository to its latest version.

To update the path of SAS Forecast Server repository:

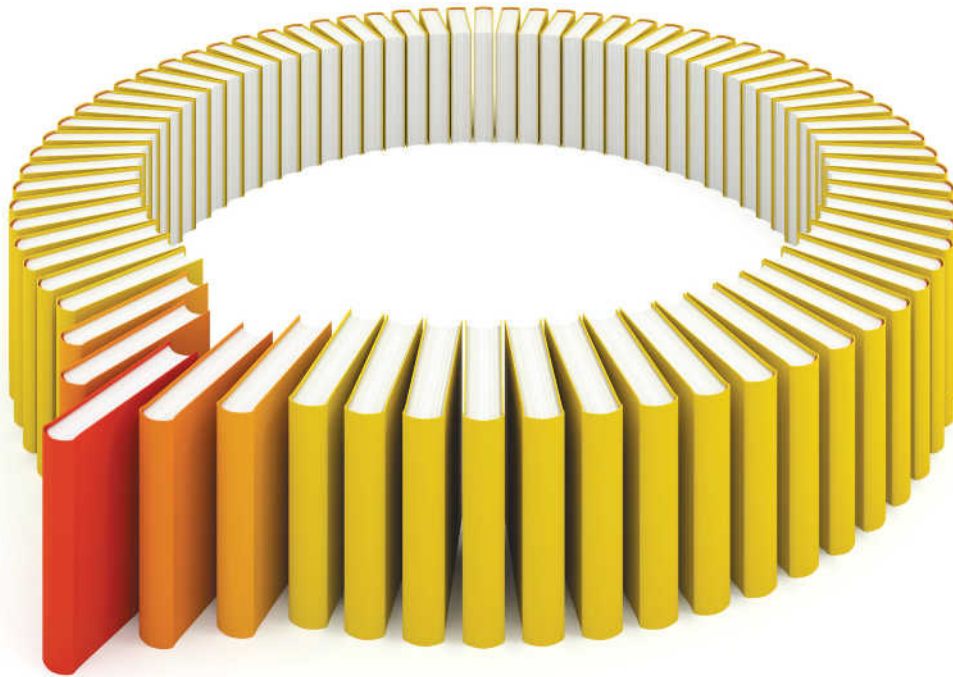
- 1 Log on to SAS Management Console as a user who can update the path of SAS Forecast Server.
- 2 On the **Plug-ins** tab, select **Application Management** ► **Configuration Manager** ► **SAS Application Infrastructure** ► **Forecast Analyst**.
- 3 Right-click **Forecast Analyst**, and select **Properties**. The Forecast Analyst Properties dialog box appears.
- 4 Click the **Advanced** tab.
- 5 In the **GL_FS_PROJ_REPO_PATH** property, update the path of the latest version of SAS Forecast Server repository from `/system/Applications/SAS Forecast Server/Forecast Server 13.1` to `/System/Applications/SAS Forecast Server/Forecast Server 14.3`.
- 6 Click **OK**.

Recommended Reading

- *SAS Forecast Analyst Workbench 5.3: User's Guide*
- *SAS Forecast Analyst Workbench 5.3: Administrator's Guide*
- *SAS Forecast Analyst Workbench 5.3: Data Reference Guide*
- *SAS 9.4 Guide to Software Updates*

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